

# SEQUENCE LISTING

<110> Mirkin, Chad A.  
Letsinger, Robert L.  
Mucic, Robert C.  
Storhoff, James J.  
Elghanian, Robert  
Taton, Thomas A.

<120> NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO  
AND USES THEREFOR

<130> 00-715-A

<140> 09/760,500

<141> 2001-01-12

<150> 09/603,830

<151> 2000-06-26

<150> 09/344,667

<151> 1999-06-25

<150> 09/240,755

<151> 1999-01-29

<150> PCT/US97/12783

<151> 1997-07-21

<150> 60/031,809

<151> 1996-07-29

<150> 60/200,161

<151> 2000-04-26

<160> 64

<170> Microsoft Word 2000

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 1

aaacgactct agcgcgtata

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:random  
 synthetic sequence

<400> 2  
 atggcaacta tacgcgctag 20

<210> 3  
 <211> 16  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:random  
 synthetic sequence

<400> 3  
 ccttgagatt tccctc 16

<210> 4  
 <211> 16  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:random  
 synthetic sequence

<400> 4  
 gagggaaatc tcaagg 16

<210> 5  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:random  
 synthetic sequence

<400> 5  
 aacttgcgct aatggcga 18

<210> 6  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:random  
 synthetic sequence

<400> 6

aagttgcgct ttacggctaa tggcga

26

<210> 7

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 7

tctccttccc ttttc

15

<210> 8

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 8

gaaaagggaa ggaga

15

<210> 9

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 9

cttttcctt cctct

15

<210> 10

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 10

aaacgactct agcgcgata gttgccat

28

<210> 11

<211> 28

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 11  
atggcaacta tacgcgctag agtcgttt

28

<210> 12  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 12  
cctatcgacc atgct

15

<210> 13  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 13  
agcatggtcg ataggaaacg actctagcgc

30

<210> 14  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 14  
gcgctagagt cgttt

15

<210> 15  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random

synthetic sequence

<400> 15

agcatggtcg ataggatggc aactatacgc

30

<210> 16

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 16

gtcgatagga aacgactcta gcgc

24

<210> 17

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 17

agcatggttg ataggaaacg actctagcgc

30

<210> 18

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 18

agcatgtttg ataggaaacg actctagcgc

30

<210> 19

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 19

tctcaactcg ta

12

<210> 20  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 20  
cgcatcagg at

12

<210> 21  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 21  
tacgagttga gagagtgtccc acat

24

<210> 22  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 22  
tacgagttga gaatcctgaa tgcg

24

<210> 23  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 23  
tacgagttga gaatcctgaa tgct

24

<210> 24  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 24

tacgagttga gactcctgaa tgcg

24

<210> 25

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 25

tacgagttga gaatcctgaa tgc

23

<210> 26

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 26

tacgagttga gacatcctga atgcg

25

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 27

tacgagttga gaatcctgaa tgcg

24

<210> 28

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 28  
taggacttac gc 12

<210> 29  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 29  
tacgagttga gaccgttaag acgaggcaat catgcaatcc tgaatgcg 48

<210> 30  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 30  
tgcattgattg cctcgtctta acgg 24

<210> 31  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 31  
tacgagttga gaccgttaag acgaggcaat catgcatata ttggacgctt tacggacaac 60  
atcctgaatg cg 72

<210> 32  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 32  
gttgctcgta aagcgtccaa tatatgcatg attgcctcgt cttaacgg 48



<210> 33  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 33  
tctcaactcg ta

12

<210> 34  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 34  
tacgagttga gaatcctgaa tgcg

24

<210> 35  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 35  
cgcattcagg at

12

<210> 36  
<211> 141  
<212> DNA  
<213> anthrax

<400> 36  
ggcggatgag tcagtagtta aggaggctca tagagaagta attaattcgt caacagaggg 60  
attattgtta aatattgata aggatataag aaaaatatta tccagggtta tattgtagaa 120  
attgaagata ctgaagggt t 141

<210> 37  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random

synthetic sequence

<400> 37  
taacaataat ccctc 15

<210> 38  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 38  
atccttatca atatt 15

<210> 39  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 39  
tgagcctcct taactactga ctcacccgcc 30

<210> 40  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 40  
tggtgacgaa ttaattactt ctcta 25

<210> 41  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 41  
tataaccctg gataatattt ttcttat 27

<210> 42  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 42  
aagcccttca gtatcttcaa tttctacaa

29

<210> 43  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 43  
tctcaactcg taaaaaaaaa aa

22

<210> 44  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 44  
tacgagttga gaatcctgaa tgcg

24

<210> 45  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 45  
aaaaaaaaaa cgcattcagg at

22

<210> 46  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 46

tctcaactcg taaaaaaaaa aa

22

<210> 47

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 47

aaaaaaaaaa cgcattcagg at

22

<210> 48

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 48

tacgagttga gaatcctgaa tgcg

24

<210> 49

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 49

ctacttagat ccgagtgtccc acat

24

<210> 50

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 50  
cgcatcagg at 12

<210> 51  
<211> 32  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 51  
aaaaaaaaaa aaaaaaaaaa cgcatcagg at 32

<210> 52  
<211> 32  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 52  
cgcatcagg atwwwwwww wwwwwwww ww 32

<210> 53  
<211> 12  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 53  
atcctgaatg cg 12

<210> 54  
<211> 12  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 54  
atcctgaatg cg 12

<210> 55

<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 55  
aaaaaaaaaa aaaaaaaaaa

20

<210> 56  
<211> 27  
<212> DNA  
<213> Anthrax

<400> 56  
ggattattgt taattattga taaggat

27

<210> 57  
<211> 12  
<212> DNA  
<213> Anthrax

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> n stands for a, g, c, or t

<400> 57  
taacaatnat cc

12

<210> 58  
<211> 15  
<212> DNA  
<213> Anthrax

<400> 58  
atccttatca atatt

15

<210> 59  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 59  
tctcaactcg ta

12

<210> 60  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 60  
tacgagttga gaatcctgaa tgcg

24

<210> 61  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 61  
gcgtaagtcc taacgtacta acggagcaga attgccagag ttgagcat

48

<210> 62  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 62  
gcgtaagtcc tacaacaggc atttcgcagg ttatatacgt actaacggag cagaattgcc 60  
agagttgagc at 72

<210> 63  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 63  
tgcatgattg cctcgtctta acgg

24

<210> 64  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random  
synthetic sequence

<400> 64

gttggtccgta aagcgtccaa tatatgcatg attgcctcgt cttaacgg

48